Our first indicator is rills and most of us have seen rills in the field, they're small erosional rivulets or where that you've had soil eroded from hillsides as water flows down the hill. We are concerned about things such as the length of these, the width and depth, the density of them and the need for area and whether they are currently active and everyone of the indicators we are going to be comparing what we see on the area we are evaluating with what our standard has said what we should be looking for. Again, this slide is a side by side comparison of the same site, one with reference condition and one without. What I want to point out here is any of you that worked in the magna shell or shell kinds of landscapes know that there are landscapes out there where rills are common and they are part of the reference and so when you evaluate a site like that, you don't need it, you would not consider rills to be a departure from the reference, but when you have sites where you've concluded that you should not have rills and you start seeing rills on the landscape, then, you're going to rate it as departure and this particular indicator is then summarized later with other indicators in both the soil site stability and the hydrologic function attributes. Indicator number two is water flow patterns and these are the naturally occurring figures or conditions on the landscape that allows water to flow across the landscape when precipitation exceeds the infiltration rate. Now, the infiltration rate may be reduced because of some kind of use or it may be on a soil that has a naturally low infiltration rate, so, the evidence that water flow doesn't tell us the reason that the problem exist, but, it does tell us that we do have water that is moving across the landscape. Again, our comparison side by side, this is on the Ornata Ecological Research

Center outside of Las Cruces as I remember, you can see that from the one on the left, the reference states the one on the right. There can be very serious and significant changes occur in the ability of water to flow off of this landscape. This is a very important indicator for us in that if the water flow patterns are short and don't seem to go anywhere, they just simply are there on the landscape as ways that access water can in fact move, then, they're not a problem, if these begin to start being connected or begin to get larger and have the ability to carry more and more water off the site, we know that these are beginning to be evidence that we are losing the water that is necessary to main the site productivity, so, the evidence and nature are the water flow patterns becoming very important to us to understanding the landscape. What we'd like to have now is a very short video that kind of illustrates how this occurs.